

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A mobile communication control system having a plurality of access nodes and a mobile node, comprising:

a source access node to which a source mobile terminal is connected via a radio link, the source access node including,

an address manager configured to manage a first address, ~~and~~ a second address, and a third address of a destination mobile terminal connected to the mobile node via a radio link, the first address of the destination mobile terminal being a home address of the destination mobile terminal, the second address being an address indicating a destination access node allocated to the destination mobile terminal and the third address being an address indicating the mobile node allocated to the destination mobile terminal;

an address changer configured to replace a destination address in a header of a packet transmitted from the source mobile terminal without increasing the size of the header, the first address of the destination mobile terminal replaced by the second address of the destination mobile terminal; and

a router configured to route the packet to the destination access node to which the mobile node is connected via a radio link, in accordance with the changed destination address;

the destination access node including,

an address manager configured to manage the second address and ~~a~~ the third address of the destination mobile terminal;

an address changer configured to replace the destination address in the header of the received packet, the second address of the destination mobile terminal replaced by the third address of the destination mobile terminal without increasing the size of the header; and

a router configured to route the packet to the mobile node in accordance with the changed destination address; and

the mobile node including,

an address manager configured to manage the first address and the third address of the destination mobile terminal;

an address changer configured to replace the destination address in the header of the received packet, the third address of the destination mobile terminal replaced by the first address of the destination mobile terminal without increasing the size of the header; and

a packet transmitter configured to transmit the packet to the destination mobile terminal in accordance with the changed destination address.

Claim 2 (Previously Presented): The mobile communication control system according to claim 1, further comprising:

a network management server, wherein

the mobile node comprises an address assignment information transmitter configured to transmit address assignment information for a new mobile terminal to the network management server in accordance with an address assignment request transmitted from the new mobile terminal;

the network management server includes,

an address manager configured to manage a first address, a second address and a third address of the new mobile terminal in accordance with the received address assignment information; and

an address assignment direction transmitter configured to transmit an address assignment direction for the new mobile terminal to the source access node and the destination access node; and

the address manager of the source access node manages the first address and the second address of the new mobile terminal in accordance with the address assignment direction; and

the address manager of the destination access node manages the second address and the third address of the new mobile terminal in accordance with the address assignment direction.

Claim 3 (Currently Amended): The mobile communication control system according to claim 1, further comprising:

a network management server, wherein

the destination access node comprises an address assignment information transmitter configured to transmit address assignment information for the destination mobile terminal connected to the mobile node to the network management server in accordance with an address assignment request transmitted from the mobile node;

the network management server includes, comprises:

an address manager configured to manage a the first address, a the second address and a the third address of the destination mobile terminal in accordance with the received address assignment information; and

an address assignment direction transmitter configured to transmit an address assignment direction for the destination mobile terminal to the source access node; and

the address manager of the source access node manages the first address and the second address of the destination mobile terminal in accordance with the address assignment direction.

Claim 4 (Currently Amended): A network management server in a mobile communication network for transferring a packet from a source mobile terminal to a destination mobile terminal connected to a mobile node via a radio link, the mobile node being connected to a destination access node via a radio link, the server comprising:

an address manager configured to manage a first address, a second address and a third address of the destination mobile ~~terminals~~ terminal in accordance with address assignment information received from the mobile node and from the destination access node, the second address being an address indicating the destination access node allocated to the destination mobile terminal and the third address being an address indicating the mobile node allocated to the destination mobile terminal; and

an address assignment direction transmitter configured to transmit address assignment directions for directing a source access node to which the source mobile terminal is connected to update an address conversion table of the source access node to include the first address and the second address of the destination mobile terminal, and to transmit an address assignment direction for directing the destination access node to update an address conversion table of the destination access node to include the second address and the third address of the destination mobile terminal, a source mobile terminal being connected to the source access node via radio link.

Claim 5 (Previously Presented): A network management server in a mobile communication network for transferring a packet from a source mobile terminal to a destination mobile terminal connected to a mobile node via a radio link, the mobile node being connected to a destination access node via a radio link, the server comprising:

an address manager configured to manage a first address, a second address and a third address of the destination mobile terminal in accordance with address assignment information

received from the destination access node and from the mobile node, the second address being an address indicating the destination access node allocated to the destination mobile terminal and the third address is an address indicating the mobile node allocated to the destination mobile terminal; and

an address assignment direction transmitter configured to transmit an address assignment direction, the address assignment direction directing a source access node to which the source mobile terminal is connected via radio link to update an address conversion table of the source access node to include the first address and the second address of the destination mobile terminal.

Claim 6 (Currently Amended): A mobile node in a mobile communication network for transferring a packet from a source mobile terminal to a destination mobile terminal, the source mobile terminal being connected to a source access node via radio link, the destination mobile terminal being connected to the mobile node via a radio link, the mobile node being connected to a destination access node via a radio link, the mobile node comprising:

an address manager configured to manage a first address and a third address of the destination mobile terminal;

an address changer configured to change a destination address in the packet transmitted from the source access node, from the third address of the destination mobile terminal to the first address of the destination mobile terminal, only one address associated with the destination mobile terminal provided in the packet;

a packet transmitter configured to transmit the packet to the destination mobile terminal in accordance with the changed destination address; and

an address assignment information transmitter configured to transmit address assignment information including ~~the~~ a first address and ~~the~~ a third address of a new mobile

terminal to a network management server in accordance with an address assignment request transmitted from the new mobile terminal.

Claim 7 (Original): The mobile node according to claim 6, further comprising an address assignment request transmitter configured to transmit an address assignment request for mobile terminals connected to the mobile node to a second access node, when the mobile node enters an area managed by the second access node different from a first access node to which the mobile node is connected at the moment.

Claim 8 (Previously Presented): An access node in a mobile communication network for transferring a packet to a destination mobile terminal connected to a mobile node via a radio link, the destination mobile terminal having first, second, and third addresses, the mobile node being connected to the access node via a radio link, the access node comprising:

an address manager configured to manage the second address and the third address of the destination mobile terminal connected to the mobile node via a radio link, the second address being an address indicating a destination access node allocated to the destination mobile terminal and the third address being an address indicating the mobile node allocated to a destination mobile terminal;

an address changer configured to replace a destination address in the packet transmitted from a source access node, the second address of the destination mobile terminal replaced by the third address of the destination mobile terminal, a source mobile terminal being connected to the source access node via a radio link;

a router configured to route the packet to the mobile node in accordance with the changed destination address; and

an address assignment information transmitter configured to transmit address assignment information including the second address and the third address of the destination mobile terminal to a network management server in accordance with an address assignment request transmitted from the mobile node.

Claim 9 (Previously Presented): A mobile communication control system having a plurality of access nodes, an anchor node and a mobile node, comprising:

a source access node to which a source mobile terminal is connected via a radio link, including,

an address manager configured to manage a first address and a second address of a destination mobile terminal connected to the mobile node via a radio link, the first address of the destination mobile terminal being a home address of the destination mobile terminal, the second address being an address indicating a destination access node allocated to the destination mobile terminal, and the third address being an address indicating a mobile node allocated to the destination mobile terminal;

an address changer configured to replace a destination address in a header of a packet transmitted from the source mobile terminal, the first address of the destination mobile terminal replaced by the second address of the destination mobile terminal without increasing the size of the header; and

a router configured to route the packet to the anchor node in accordance with the changed destination address;

the anchor node including,

an address manager configured to manage the second address and a third address of the destination mobile terminal and encapsulation information for specifying the mobile node;

an address changer configured to replace a destination address in the packet transmitted from the source access node, the second address of the destination mobile terminal replaced by the third address of the destination mobile terminal, and to encapsulate the packet using the encapsulation information; and

a router configured to route the packet to a destination access node in accordance with the encapsulation information, the mobile node being connected to the destination access node via a radio link;

the destination access node including,

an address manager configured to manage the encapsulation information; and

a router configured to decapsulate the received packet, and to route the packet to the mobile node specified by the encapsulation information encapsulated in the packet, when the packet includes the third address of the destination mobile terminal; and

the mobile node including,

an address manager configured to manage the first address and the third address of the destination mobile terminal;

an address changer configured to replace a destination address in the received packet, the third address of the destination mobile terminal replaced by the first address of the destination mobile terminal; and

a packet transmitter configured to transmit the packet to the destination mobile terminal in accordance with the changed destination address.

Claim 10 (Previously Presented): The mobile communication control system according to claim 9, further comprising:

a network management server, wherein

the mobile node comprises an address assignment information transmitter configured



to transmit address assignment information for a new mobile terminal to the network management server in accordance with an address assignment request transmitted from the new mobile terminal;

the network management server includes,

an address manager configured to manage a first address, a second address and a third address of the new destination mobile terminal and the encapsulation information, in accordance with the received address assignment information; and

an address assignment direction transmitter configured to transmit an address assignment direction for the new mobile terminal to the source access node and the anchor node;

the address manager of the source access node manages the first address and the second address of the new mobile terminal in accordance with the address assignment direction; and

the address manager of the anchor node manages the second address and the third address of the new mobile terminal and the encapsulation information, in accordance with the address assignment direction.

Claim 11 (Previously Presented): The mobile communication control system according to claim 9, further comprising:

a network management server, wherein

the source access node comprises an address assignment information transmitter configured to transmit address assignment information including the encapsulation information to the network management server in accordance with an address assignment request transmitted from the mobile node;

the network server includes,

an address manager configured to manage the first addresses, the second addresses and the third addresses of the destination mobile terminal and the encapsulation information, in accordance with the received address assignment information; and

an address assignment direction transmitter configured to transmit an address assignment direction for the destination mobile terminal to the anchor node; and

the address manager of the anchor node manages the first addresses, the second addresses and the third addresses of the destination mobile terminal and the encapsulation information, in accordance with the address assignment direction.

Claim 12 (Previously Presented): A network management server in a mobile communication network for transferring a packet to a destination mobile terminal via an anchor node, the mobile terminal being connected to a mobile node via a radio link, the mobile node being connected to a destination access node via a radio link, the server comprising:

an address manager configured to manage a first address, a second address and a third address of a new mobile terminal and encapsulation information for specifying the mobile node, in accordance with address assignment information for the new mobile terminal received from the mobile node and the anchor node, the second address being an address indicating the destination access node allocated to the destination mobile terminal and the third address being an address indicating the mobile node allocated to the destination mobile terminal; and

an address assignment direction transmitter configured to transmit an address assignment direction for directing a source access node to update an address conversion table of the source access node to include the first address and the second address of the new mobile terminal, and to transmit an address assignment direction for directing the anchor

node to update an address conversion table of the anchor node to include the second address and the third address of the new mobile terminal and the encapsulation information, a source mobile terminal being connected to the source access node.

Claim 13 (Previously Presented): A network management server in a mobile communication network for transferring a packet to a destination mobile terminal via an anchor node, the destination mobile terminal being connected to a mobile node via a radio link, the mobile node being connected to a destination access node via a radio link, the server comprising:

an address manager configured to manage a first address, a second address and a third address of the destination mobile terminal and encapsulation information for specifying the mobile node in accordance with address assignment information received from the mobile node and the anchor node, the second address being an address indicating the destination access node allocated to the destination mobile terminal and the third address being an address indicating the mobile node allocated to the destination mobile terminal; and

an address assignment direction transmitter configured to transmit an address assignment direction for directing the anchor node to update an address conversion table of the anchor node to include the second address and the third address of the destination mobile terminal and the encapsulation information.

Claim 14 (Cancelled).

Claim 15 (Previously Presented): An anchor node in a mobile communication network for transferring a packet to a destination mobile terminal via an anchor node, the destination mobile terminal having three addresses including a first address which is the

home address of the destination mobile terminal, the destination mobile terminal being connected to a mobile node via a radio link, the mobile node being connected to a destination access node via a radio link, the anchor node comprising:

an address manager configured to manage the second address and the third address of the destination mobile terminal and encapsulation information for specifying the mobile node, the second address being an address indicating the destination access node allocated to the destination mobile terminal and the third address being an address indicating the mobile node allocated to the destination mobile terminal;

an address changer configured to replace a destination address in a header of the packet transmitted from a source access node, the second address of the destination mobile terminal replaced by the third address of the destination mobile terminal without increasing the size of the header, and to encapsulate the packet using the encapsulation information, a source mobile terminal being connected to the source access node; and

a router configured to route the encapsulated packet to the destination access node in accordance with the encapsulation information.

Claim 16 (Previously Presented): A mobile communication control system having a plurality of access nodes and a mobile node, comprising:

a source access node to which a source mobile terminal is connected via a radio link, including,

an address manager configured to manage a first address and a second address of a destination mobile terminal connected to the mobile node via a radio link;

an address changer configured to replace a destination address in a header of a packet transmitted from the source mobile terminal, the first address of the destination mobile terminal replaced by the second address of the destination mobile terminal without increasing

the size of the header, the first address of the destination mobile terminal being a home address of the destination mobile terminal; and

a router configured to route the packet to the mobile node in accordance with the changed destination address; and

the mobile node including,

an address manager configured to manage the first address and the second address of a destination mobile terminal;

an address changer configured to replace a destination address in the header of the received packet, the second address of the destination mobile terminal replaced by the first address of the destination mobile terminal without increasing the size of the header; and

a packet transmitter configured to transmit the packet to the destination mobile terminal in accordance with the changed destination address.

Claim 17 (Previously Presented): The mobile communication control system according to claim 16, wherein

a destination access node to which the mobile node is connected via a radio link comprises an address assigner configured to assign a predetermined range of addresses to the mobile node in accordance with an address assignment request transmitted from the mobile node, the predetermined range of addresses being selected from among range of addresses assigned to the destination access node; and

the address manager of the mobile node assigns a second address of a new mobile terminal included in the predetermined range of addresses in accordance with an address assignment request transmitted from the new mobile terminal, so as to manage a first address and the second address of the new mobile terminal.

Claim 18 (Previously Presented): A mobile node in a mobile communication network for transferring a packet to a destination mobile terminal connected to a mobile node via a radio link, the mobile node being connected to a destination access node via a radio link, the mobile node comprising:

an address manager configured to manage a first address and a second address of the destination mobile terminal, the first address of the destination mobile terminal being the home address of the destination mobile terminal;

an address changer configured to change a destination address in the packet transmitted from a source access node, from the second address of the destination mobile terminal to the first address of the destination mobile terminal, a source mobile terminal being connected to the source access node; and

a packet transmitter configured to transmit the packet to the destination mobile terminal in accordance with the changed destination address;

and wherein the address manager assigns a second address to a new mobile terminal included in a predetermined range of addresses assigned by the destination access node in accordance with an address assignment request transmitted from the new mobile terminal, so as to manage a first address and the second address of the new mobile terminal.

Claim 19 (Cancelled)

Claim 20 (Cancelled).